



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,924	11/21/2003	Jack Thiesen	MIC-42 (P50-0092)	2390
22827	7590	05/16/2006	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			ZIMMERMAN, BRIAN A	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/718,924

Applicant(s)

THIESEN ET AL.

Examiner

Brian A. Zimmerman

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 18-30 and 32-39 is/are rejected.
- 7) ☒ Claim(s) 15-17 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2612

**EXAMINER'S RESPONSE**

**Status of Application**

In response to the applicant's amendment received on 3/7/06. The examiner has considered the new presentation of claims and applicant arguments in view of the disclosure and the present state of the prior art. And it is the examiner's position that claims 1-14,18-30,32-39 are unpatentable for the reasons set forth in this office action:

This case was previously assigned to Art unit 2635, but has been reassigned to Division 2612. Accordingly, all correspondence regarding this case should reflect Division 2612.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

1. Claims 1-7,18 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Dinello (2004-0212486).

Dinello shows a tire sensor electronic assembly that includes a condition responsive device that senses the temperature pressure of the tire, see paragraph 36. Also in paragraph 36, Dinello discusses the device being used to transmit information regarding other tire parameters including tread wear. An RF source (interpreted as either the transmitter 42 or the receiver antenna

Art Unit: 2612

associated with the SAW 32) that is used to excite a SAW at resonant frequency levels to generate an output signal in response to the RF signal. Dinello includes an antenna 60 which is used to pass the generated signal and switching element (paragraph 34) associated with the battery to save power.

***Claim Rejections - 35 USC § 103***

2. Claims 8-14,19-30,32-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dinello as applied to claim 1 above, and further in view of Breed (2004/0130442).

In an analogous art, Breed teaches wireless sensors on a vehicle that measure tire temperature pressure and report the data to a vehicle controller. Paragraph 385 discusses that each sensor can include it's own microprocessor and each device (sensor) would have an address such that it would respond only to information containing it's address. This would provide a cleaner communication system in that it would remove unsolicited communication. Additional such would provide increased battery saving in that a particular device need not transmit unnecessarily wasting power.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a microprocessor with each sensor of Dinello to make the sensors addressable as suggested by Breed.

Art Unit: 2612

3. Claims 15-17,31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments filed 3/7/06 have been fully considered but they are not persuasive.

The applicant argues that the Dinello publication does not provide a switching device coupled to the SAW, selectively operated so that one or more data types may be selectively transmitted from the assembly. The applicant admits that Dinello includes a switch that is in series with the battery to turn the system off when the vehicle is not moving. During operation, the switch turns off and also turns on the device such that the data can be transmitted only when the device is on. Therefore, the switch is selectively controlled, based on motion of the vehicle, to transmit the data type from the assembly. This provides the step of selectively transmitting the data from the assembly as now claimed.

The applicant argues (regarding claims 19-32) that Dinello does not disclose a switch coupled between the SAW and any RF source. Breed is cited for teaching an addressable switch to enable selective communication. Such a switch would inherently have to receive the signal from the RF source and would only reply or pass the signal on to other elements in the system if the address

Art Unit: 2612

matched. Therefore, implementing the concepts taught by Breed would provide a switch between the SAW and the RF source as argued, and claimed.

The applicant argues that their device (as per figures 6 and 7) have the capability to cloak or hide. This argument is not relevant to the claims since such an element is not recited in the claims.

The applicant argues, regarding claims 33-39, that the references do not teach transmitting data indicative of a second physical parameter associated with the tire may be selectively transmitted. Dinello specifically states in paragraph 36, the transmission of secondary data including the tire balancing or wear on the tire.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

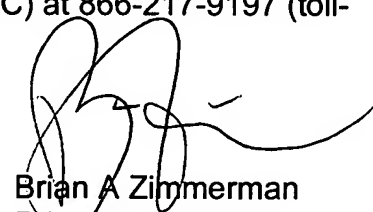
Art Unit: 2612

the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian A. Zimmerman whose telephone number is 571-272-3059. The examiner can normally be reached on 7 am to 4 pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brian A Zimmerman  
Primary Examiner  
Art Unit 2612

BZ